

SAFETY DATA SHEET



ACCELERON® D-281 FUNGICIDE SEED TREATMENT

Version 3.0 / USA
102000026368

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Revision Date: 08/04/2020
Print Date: 08/06/2020

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product identifier

Trade name ACCELERON® D-281 FUNGICIDE SEED TREATMENT
Product code (UVP) 81681821
SDS Number 102000026368
EPA Registration No. 264-1169-524

Relevant identified uses of the substance or mixture and uses advised against

Use Seed treatment, Fungicide
Restrictions on use See product label for restrictions.

Information on supplier

Supplier Bayer CropScience LP
800 North Lindbergh Blvd.
St. Louis, MO 63167
USA
Responsible Department Email: SDSINFO.BCS-NA@bayer.com

Emergency telephone no.

Emergency Telephone Number (24hr/ 7 days) 1-800-334-7577

Product Information Telephone Number 1-866-99BAYER (1-866-992-2937)

SECTION 2: HAZARDS IDENTIFICATION

Classification in accordance with regulation HCS 29CFR §1910.1200

This material is not hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29CFR 1910.1200.

Hazards Not Otherwise Classified (HNOC)

No physical hazards not otherwise classified.
No health hazards not otherwise classified.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

| Hazardous Component Name | CAS-No. | Concentration % by weight |
|--------------------------|-------------|---------------------------|
| Fluoxastrobin | 361377-29-9 | 41.4 |

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SECTION 4: FIRST AID MEASURES

Description of first aid measures

| | |
|---|---|
| General advice | When possible, have the product container or label with you when calling a poison control center or doctor or going for treatment. |
| Inhalation | Move to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a physician or poison control center immediately. |
| Skin contact | Take off contaminated clothing and shoes immediately. Wash off immediately with plenty of water for at least 15 minutes. Call a physician or poison control center immediately. |
| Eye contact | Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a physician or poison control center immediately. |
| Ingestion | Call a physician or poison control center immediately. Rinse out mouth and give water in small sips to drink. DO NOT induce vomiting unless directed to do so by a physician or poison control center. Never give anything by mouth to an unconscious person. Do not leave victim unattended. |
| Most important symptoms and effects, both acute and delayed | |
| Symptoms | To date no symptoms are known. |
| Indication of any immediate medical attention and special treatment needed | |
| Treatment | Appropriate supportive and symptomatic treatment as indicated by the patient's condition is recommended. |

SECTION 5: FIREFIGHTING MEASURES

Extinguishing media

| | |
|-------------------|--|
| Suitable | Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. |
| Unsuitable | High volume water jet |

Special hazards arising from the substance or mixture Dangerous gases are evolved in the event of a fire.

Advice for firefighters

Special protective equipment for firefighters Firefighters should wear NIOSH approved self-contained breathing apparatus and full protective clothing. In the event of fire and/or explosion do not breathe fumes.

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| | |
|----------------------------------|--|
| Further information | Fight fire from upwind position. Keep out of smoke. Cool closed containers exposed to fire with water spray. Do not allow run-off from fire fighting to enter drains or water courses. Whenever possible, contain fire-fighting water by diking area with sand or earth. |
| Flash point | > 100 °C |
| Auto-ignition temperature | 420 °C / 788 °F |
| Lower explosion limit | No data available |
| Upper explosion limit | No data available |
| Explosivity | Not explosive 92/69/EEC, A.14 / OECD 113 |

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Precautions Keep unauthorized people away. Isolate hazard area. Avoid contact with spilled product or contaminated surfaces.

Methods and materials for containment and cleaning up

Methods for cleaning up Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Collect and transfer the product into a properly labelled and tightly closed container. Clean contaminated floors and objects thoroughly, observing environmental regulations.

Additional advice Use personal protective equipment. If the product is accidentally spilled, do not allow to enter soil, waterways or waste water canal.

Reference to other sections Information regarding safe handling, see section 7.
Information regarding personal protective equipment, see section 8.
Information regarding waste disposal, see section 13.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Use only in area provided with appropriate exhaust ventilation. Handle and open container in a manner as to prevent spillage.

Hygiene measures Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, using the toilet or applying cosmetics.
Remove Personal Protective Equipment (PPE) immediately after handling this product. Before removing gloves clean them with soap and water. Remove soiled clothing immediately and clean thoroughly before using again. Wash thoroughly and put on clean clothing.

Conditions for safe storage, including any incompatibilities

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Requirements for storage areas and containers Store in a cool, dry place and in such a manner as to prevent cross contamination with other crop protection products, fertilizers, food, and feed. Store in original container and out of the reach of children, preferably in a locked storage area.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

| Components | CAS-No. | Control parameters | Update | Basis |
|---------------|-------------|---------------------------------|--------|----------|
| Fluoxastrobin | 361377-29-9 | 0.42 mg/m ³ (TWA) | | OES BCS* |

*OES BCS: Internal Bayer AG, Crop Science Division "Occupational Exposure Standard"

Exposure controls

Personal protective equipment

In normal use and handling conditions please refer to the label and/or leaflet. In all other cases the following recommendations would apply.

Respiratory protection When respirators are required, select NIOSH approved equipment based on actual or potential airborne concentrations and in accordance with the appropriate regulatory standards and/or industry recommendations.

Hand protection Chemical resistant nitrile rubber gloves

Eye protection Safety glasses with side-shields

Skin and body protection Wear long-sleeved shirt and long pants and shoes plus socks.

General protective measures Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and warm/tepid water.
Keep and wash PPE separately from other laundry.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Form suspension

Colour white

Odour mild

Odour Threshold No data available

pH 5.0 - 8.0 (100 %) (23 °C)

Melting point/range No data available

Boiling Point No data available

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| | |
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| Flash point | > 100 °C |
| Flammability | No data available |
| Auto-ignition temperature | 420 °C |
| Minimum ignition energy | Not applicable |
| Self-accelerating decomposition temperature (SADT) | No data available |
| Upper explosion limit | No data available |
| Lower explosion limit | No data available |
| Vapour pressure | No data available |
| Evaporation rate | No data available |
| Relative vapour density | No data available |
| Relative density | No data available |
| Density | 1.16 g/cm ³ (20 °C) |
| Water solubility | dispersible |
| Partition coefficient: n-octanol/water | Fluoxastrobin: log Pow: 2.86 (20 °C) |
| Viscosity, dynamic | 160 - 280 mPa.s (20 °C) Velocity gradient 20 /s 60 - 120 mPa.s (20 °C) Velocity gradient 100 /s |
| Viscosity, kinematic | No data available |
| Impact sensitivity | Not impact sensitive. |
| Oxidizing properties | No oxidizing properties |
| Explosivity | Not explosive 92/69/EEC, A.14 / OECD 113 |
| Other information | Further safety related physical-chemical data are not known. |

SECTION 10: STABILITY AND REACTIVITY

Reactivity

| | |
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| Thermal decomposition | Stable under normal conditions. |
| Chemical stability | Stable under recommended storage conditions. |
| Possibility of hazardous reactions | No hazardous reactions when stored and handled according to prescribed instructions. |

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| Conditions to avoid | Extremes of temperature and direct sunlight. |
| Incompatible materials | No incompatible materials known. |
| Hazardous decomposition products | No decomposition products expected under normal conditions of use. |

SECTION 11: TOXICOLOGICAL INFORMATION

| | |
|---|--|
| Exposure routes | Skin contact, Eye contact, Ingestion, Inhalation |
| Immediate Effects | |
| Eye | Not expected to produce significant adverse effects when recommended use instructions are followed. |
| Skin | Not expected to produce significant adverse effects when recommended use instructions are followed. |
| Ingestion | Not expected to produce significant adverse effects when recommended use instructions are followed. |
| Inhalation | Not expected to produce significant adverse effects when recommended use instructions are followed. |
| Information on toxicological effects | |
| Acute oral toxicity | LD50 (female Rat) > 5,000 mg/kg |
| Acute inhalation toxicity | LC50 (male/female combined Rat) > 5.15 mg/l Exposure time: 4 h Determined in the form of a respirable aerosol. |
| Acute dermal toxicity | LD50 (male/female combined Rat) > 5,000 mg/kg |
| Skin corrosion/irritation | No skin irritation (Rabbit) |
| Serious eye damage/eye irritation | No eye irritation (Rabbit) |
| Respiratory or skin sensitisation | Skin: Non-sensitizing. (Mouse) OECD Test Guideline 429, local lymph node assay (LLNA) |

Assessment STOT Specific target organ toxicity – single exposure

Fluoxastrobin: Based on available data, the classification criteria are not met.

Assessment STOT Specific target organ toxicity – repeated exposure

Fluoxastrobin did not cause specific target organ toxicity in experimental animal studies.

Assessment mutagenicity

Fluoxastrobin was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.

Assessment carcinogenicity

Fluoxastrobin was not carcinogenic in lifetime feeding studies in rats and mice.

ACGIH

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None.

NTP

None.

IARC

None.

OSHA

None.

Assessment toxicity to reproduction

Fluoxastrobin caused reproduction toxicity in a two-generation study in rats only at dose levels also toxic to the parent animals. The reproduction toxicity seen with Fluoxastrobin is related to parental toxicity.

Assessment developmental toxicity

Fluoxastrobin did not cause developmental toxicity in rats. Fluoxastrobin caused developmental toxicity in rabbits only at dose levels toxic to the dams. The developmental effects seen with Fluoxastrobin are related to maternal toxicity.

Aspiration hazard

Based on available data, the classification criteria are not met.

Further information

Only acute toxicity studies have been performed on the formulated product.
The non-acute information pertains to the active ingredient(s).

SECTION 12: ECOLOGICAL INFORMATION

| | |
|--|---|
| Toxicity to fish | LC50 (Oncorhynchus mykiss (rainbow trout)) 0.44 mg/l Exposure time: 96 h The value mentioned relates to the active ingredient fluoxastrobin. |
| Toxicity to aquatic invertebrates | EC50 (Daphnia magna (Water flea)) 0.48 mg/l Exposure time: 48 h The value mentioned relates to the active ingredient fluoxastrobin. |
| Toxicity to aquatic plants | ErC50 (Raphidocelis subcapitata (freshwater green alga)) 2.10 mg/l Growth rate; Exposure time: 72 h The value mentioned relates to the active ingredient fluoxastrobin. |
| Biodegradability | Fluoxastrobin: Not rapidly biodegradable |
| Koc | Fluoxastrobin: Koc: 424 - 1582 |
| Bioaccumulation | Fluoxastrobin: Bioconcentration factor (BCF) 52 Does not bioaccumulate. |
| Mobility in soil | Fluoxastrobin: Slightly mobile in soils |

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Results of PBT and vPvB assessment

PBT and vPvB assessment Fluoxastrobin: This substance is not considered to be persistent, bioaccumulative and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulative (vPvB).

Additional ecological information No other effects to be mentioned.

Environmental precautions Do not allow to get into surface water, drains and ground water. Do not contaminate surface or ground water by cleaning equipment or disposal of wastes, including equipment wash water. Apply this product as specified on the label.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

Product Dispose in accordance with all local, state/provincial and federal regulations.

Contaminated packaging Do not re-use empty containers. Consult state and local regulations regarding the proper disposal of container. Follow advice on product label and/or leaflet.

RCRA Information Characterization and proper disposal of this material as a special or hazardous waste is dependent upon Federal, State and local laws and are the user's responsibility. RCRA classification may apply.

SECTION 14: TRANSPORT INFORMATION

49CFR Not dangerous goods / not hazardous material

IMDG

UN number **3082**
Class 9
Packaging group III
Marine pollutant YES
Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (FLUOXASTROBIN SOLUTION)

IATA

UN number **3082**
Class 9
Packaging group III
Environm. Hazardous Mark YES
Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

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(FLUOXASTROBIN SOLUTION)

This transportation information is not intended to convey all specific regulatory information relating to this product. It does not address regulatory variations due to package size or special transportation requirements.

Freight Classification: CHEMICALS, N.O.I.

SECTION 15: REGULATORY INFORMATION

EPA Registration No. 264-1169-524

US Federal Regulations

TSCA list

Water 7732-18-5

1,2-Propanediol 57-55-6

Alkylaryl polyglycol ether 104376-75-2

US. Toxic Substances Control Act (TSCA) Section 12(b) Export Notification (40 CFR 707, Subpt D)

No export notification needs to be made.

SARA Title III - Section 302 - Notification and Information

Not applicable.

SARA Title III - Section 313 - Toxic Chemical Release Reporting

None.

US States Regulatory Reporting

CA Prop65

This product does not contain any substances known to the State of California to cause cancer.

This product does not contain any substances known to the State of California to cause reproductive harm.

US State Right-To-Know Ingredients

1,2-Propanediol 57-55-6 MN, RI

Environmental

CERCLA

None.

Clean Water Section 307(a)(1)

None.

Safe Drinking Water Act Maximum Contaminant Levels

None.

SECTION 16: OTHER INFORMATION

Abbreviations and acronyms

49CFR Code of Federal Regulations, Title 49

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| | |
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| ACGIH | US. ACGIH Threshold Limit Values |
| ATE | Acute toxicity estimate |
| CAS-Nr. | Chemical Abstracts Service number |
| CERCLA | Comprehensive Environmental Response, Compensation, and Liability Act |
| EINECS | European inventory of existing commercial substances |
| ELINCS | European list of notified chemical substances |
| IARC | International Agency for Research on Cancer |
| IATA | International Air Transport Association |
| IMDG | International Maritime Dangerous Goods |
| N.O.S. | Not otherwise specified |
| NTP | US. National Toxicology Program (NTP) Report on Carcinogens |
| OECD | Organization for Economic Co-operation and Development |
| TDG | Transportation of Dangerous Goods |
| TWA | Time weighted average |
| UN | United Nations |
| WHO | World health organisation |

NFPA 704 (National Fire Protection Association):

Health - 1 Flammability - 1 Instability - 0 Others - none

HMIS (Hazardous Materials Identification System, based on the Third Edition Ratings Guide)

Health - 1 Flammability - 1 Physical Hazard - 0 PPE -

0 = minimal hazard, 1 = slight hazard, 2 = moderate hazard, 3 = severe hazard, 4 = extreme hazard

Reason for Revision: The following sections have been revised: Section 8: Exposure Controls / Personal Protection. Section 12. Ecological information. Section 15: Regulatory information. Reviewed and updated for general editorial purposes.

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